

Claims

I claim:

1. A motorized conveyor roller having a rotatable portion and at least one
5 stationary end.
2. A motorized conveyor roller as claimed in claim 1 wherein said rotatable
portion is disposed intermediate to opposite stationary ends.
- 10 3. A motorized conveyor roller as claimed in claim 2 wherein said rotatable
portion comprises a rotatable displaceable roller tube.
4. A motorized conveyor roller as claimed in claim 3 wherein said roller tube
includes a motor for rotating said roller tube.
- 15 5. A motorized conveyor roller as claimed in claim 4 wherein each said
stationary end is axially disposed about a central shaft.
6. A motorized conveyor roller as claimed in claim 5 wherein said central
20 shaft comprises a rotatable shaft portion disposed between said first and second
spaced stationary shafts.
7. A motorized conveyor roller as claimed in claim 6 wherein said first and
second stationary shafts carry said two stationary ends respectively.
- 25 8. A motorized conveyor roller as claimed in claim 7 wherein said rotatable
shaft portion is carried by said motor.
9. A motorized conveyor roller as claimed in claim 8 wherein one end of said
30 rotatable shaft portion presents a pinion for driving said rotatable roller tube.
10. A motorized conveyor roller as claimed in claim 9 wherein each of said
stationary ends comprise a generally cylindrical surface presenting an outer
diameter less than the outer diameter of said rotatable roller tube.

11. A motorized conveyor roller as claimed in claim 10 wherein said outer diameter of said rotatable roller tube is adapted to drive a conveyor belt.

12. A conveyor system as claimed in claim 11 wherein said stationary ends
5 bar access to said rotatable roller tube when said stationary ends are accidentally contacted.

13. A motorized conveyor roller for supporting and driving a conveyor medium comprising:

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(a) a hollow drum defining a rotatable supporting surface having a cylindrical shape disposed between said first and second generally cylindrical stationary ends;

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(b) said first and second generally cylindrical stationary ends co-axially mounted to first and second spaced apart stationary shafts respectively;

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(c) one end of each of said stationary shafts disposed internally of said hollow drum for carrying drive means for rotating said hollow drum between said generally cylindrical stationary ends.

14. A motorized conveyor roller as claimed in claim 13 wherein said outer surface of said hollow drum presents an outer diameter greater than the outer
25 diameter of each of said generally cylindrical stationary ends.

15. A motorized conveyor roller as claimed in claim 14 wherein said outer surface of said hollow drum includes means for increasing the co-efficient of friction between said outer surface of said hollow drum and said conveyor
30 medium.

16. A motorized conveyor roller as claimed in claim 15 wherein said motor presents a rotating shaft co-axially disposed between said stationary shafts.

17. A motorized conveyor roller as claimed in claim 16 wherein one end of said rotating shaft includes a pinion for driving gear means.

18. A motorized conveyor roller as claimed in claim 17 wherein one end of one
5 of said stationary shafts further includes an internal gear connected to said hollow drum and engageable with said gear means for rotating said hollow drum.

19. A motorized conveyor roller as claimed in claim 18 wherein said stationary ends are secured to said stationary shafts.

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20. A method of barring axis to a motorized rotatable conveyor roller for driving a conveyor medium by disposing said motorized rotatable conveyor roller between opposed generally cylindrical stationary ends.